

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 07/27/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/764,322	01/22/2004	Kevin Beller	SEY-004	8173
26717	7590 07/27/2005		EXAM	INER
RONALD CRAIG FISH, A LAW CORPORATION			FLETCHER,	MARLON T
PO BOX 820 LOS GATOS, CA 95032			ART UNIT	PAPER NUMBER
	,		2837	

 \cdot

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/764,322	BELLER, KEVIN			
Office Action Summary	Examiner	Art Unit			
	Marlon T. Fletcher	2837			
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wit	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR F THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicat - If the period for reply specified above is less than thirty (30) days - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ION. FR 1.136(a). In no event, however, may a re on. , a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MON statute, cause the application to become ABA	eply be timely filed (30) days will be considered timely. FHS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	04 May 2005.				
3) Since this application is in condition for a	,—				
Disposition of Claims					
4)⊠ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) 6-8,11,14 and 15 Claim(s) is/are allowed. 6)⊠ Claim(s) 1-5,9,10,12,13 and 16-18 is/are 7)□ Claim(s) is/are objected to. 8)□ Claim(s) are subject to restriction is	5 is/are withdrawn from consider rejected.	eration.			
Application Papers					
9)☐ The specification is objected to by the Exa	aminer.				
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
11) I he oath or declaration is objected to by t	he Examiner. Note the attached	Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119		•			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in Ape priority documents have been ureau (PCT Rule 17.2(a)).	oplication No received in this National Stage			
Attachment(s)					
1) X Notice of References Cited (PTO-892)	4) Interview Si	ummary (PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-94 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date	8) Paper No(s)	/Mail Date formal Patent Application (PTO-152)			

Art Unit: 2837

DETAILED ACTION

Claim Objections

1. Claim 9, 12, and 13, are objected to because of the following informalities:

Claims 9,12, and 13 refer to a withdrawn claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the phrase "having the same geometry as prior art single coil magnetic pickups". The language is vague and does not clearly point out the applicant's invention. The claims should not refer to the prior art, but rather should recite limitations that make up the claimed invention. If applicant wishes to claim the geometry of the pickup, those limitations which make of the geometry should be recited in the claims and not reference to prior art, wherein the prior art differs from one another.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2837

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 9, 17, and 18, are rejected under 35 U.S.C. 102(b) as being anticipated by Blucher et al. (5,811,710).

As recited in claims 1, 17, and 18, Blucher et al. disclose a magnetic pickup for a stringed musical instrument, comprising: magnet means (11, 11') for supplying a magnetic field which envelopes strings of a musical instrument; an upper coil means (21) for sensing fluctuations in a magnetic field caused primarily by said magnet means and generating an electrical string signal therefrom; a lower coil means (31) for sensing fluctuations in a primarily ambient magnetic field caused by unwanted noise and for generating an electrical noise signal therefrom; connection means for coupling said lower coil means and said upper coil means together so said string signal and said noise signal are summed but are 180 degrees out of phase (figure 4); flux transfer means (4) for dividing said magnetic flux lines in an ambient magnetic field not caused by said magnet means away from said upper coil means and into said lower coil means so as to cause electrical signals representing noise to be mostly in said electrical noise signal generated by said lower coil means, and for helping concentrate magnetic flux lines from said magnetic field caused by said magnet means so as to cause most of a conversion of magnetic field flux line fluctuation caused by vibration of said strings to electrical signal to occur in said upper coil means. Blucher et al. disclose shielding said upper coil from ambient magnetic field fluctuations not caused by vibrations of said strings, and dividing said ambient magnetic field fluctuations so as to be concentrated in

the vicinity of said lower coil (figures 1, 4, and 5); concentrating magnetic field fluctuations caused by vibrations of said strings (string flux) in said upper coil and shielding said lower coil from said string flux (figure 4); and subtracting the signal generated in said lower coil from the signal generated in said upper coil (column 4, lines 45-54).

Page 4

As recited in claim 3, Blucher et al. disclose a magnetic pickup for a stringed musical instrument having a plurality of strings, an upper coil form (21) having an upper coil winding wrapped around said upper coil form to form an upper coil; one or more magnets (11, 11') in the center of said upper coil form; comprising: a lower coil form (31) having a lower coil winding wrapped around said lower coil form; flux transfer plate means (4) for concentrating in the vicinity of said upper coil the magnetic flux generated by said one or more magnets in the center of said upper coil form, and fluctuating in accordance with vibrations of magnetically permeable strings of a stringed instrument, and for dividing ambient magnetic flux lines which are fluctuating in accordance with unwanted noise away from said upper coil and into said lower coil; connection means (figures 1 and 4) for coupling said upper coil to said lower coil such that an output signal is generated which is the difference between an electrical signal generated in said upper coil and a signal generated in said lower coil (column 1, lines 11-59).

As recited in claim 9, Blucher et al. disclose the apparatus, further comprising a plurality of ferrous caps placed between a top of said bar magnet and said strings (column 5, lines 1-12).

Art Unit: 2837

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2, 4, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blucher et al. in view of Stich (5,789,691).

Blucher is discussed above. Blucher et al. (claim 16) disclose a magnetic pickup for a stringed musical instrument, comprising: an upper coil form (2) comprised of first and second plates formed of non ferrous material, each having a plurality of holes therein in which rod magnets may be inserted, said holes aligned so as to hold said rod magnets in parallel relationship when said upper coil form is assembled (figures 1 and 5); an upper coil; a plurality of rod magnets; a lower coil form (3) made of any ferrous or non ferrous, rigid material that can serve as a bobbin around which a coil of wire can be wrapped and having a slot therein; a lower coil winding; a ferrous material slug (column 5, lines 1-12); and flux transfer plates.

Blucher et al. do not disclose an adjustable resistor nor discuss the printed circuit board.

However, Stich (claims 2 and 4) discloses an apparatus, comprising a trim pot adjustable resistor means (60) coupled to said lower coil means for allowing adjustment of the amount of cancellation of noise signal in said electrical string signal via summation with an adjustable amount of said electrical noise signal (figure 7).

Stich (claim 16) further discloses a printed circuit board for coupling said upper coil to said lower coil such that an output signal is generated which is the difference between an electrical signal generated in said upper coil and a signal generated in said lower coil.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of Stich with the apparatus of Blucher et al, because the teachings provide enhancement which allow control of the sound output from the pickup and further provide the inherent circuitry not seen in Bluchler et al.

7. Claims 5, 12, and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluchler et al.

Bluchler et al. disclose the claimed invention except for the type of magnets, and type of ferrous material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of these materials in place of the materials used in Blucher et al., since the Examiner takes Official Notice of the equivalence of the different types of material for there use in the musical art and the selection of the any of these known materials would be within the level of ordinary skill in the art.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blucher et al. in view of Kinman (5,668,520).

Blucher et al. are discussed above. Blucher et al. do not disclose a second set of vertical walls.

However, Kinman discloses an apparatus, wherein said flux transfer plate means is comprised of first and second ferrous plates formed so as to have vertical walls which shield the sides of said upper coil winding, and horizontal walls magnetically coupled to said vertical walls which shield said upper coil winding from said lower coil winding, and a second set of vertical walls magnetically coupled to said horizontal walls which guide magnetic flux into a core of said lower coil winding, and wherein vertical means orthogonal to a plane defined by said strings and horizontal means parallel to a plane defined by said strings (figures 1 and 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of Kinman with the apparatus of Blucher et al, because teachings provide a second set of walls for providing a more desirable sound by separating the coils.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T. Fletcher whose telephone number is 571-272-2063. The examiner can normally be reached on M-W, F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marlon T Fletcher Primary Examiner Art Unit 2837

MTF July 24, 2005